

ZAKRZEWSKI, L.

Country	: POLAND	H-25
Category	: Chemical Technology. Fats and Oils. Waxes. Soaps and Detergents. Flotation Agents.	
Abs. Jour	: Ref Zhur-Khimiya, No 14, 1959, No 51284	
Author	: Fejgin, J.; Tomaszewicz, M.; <u>Zakrzewski, L.</u>	
Institute	: -	
Title	: Obtainment of Water Emulsions Made with Silicone Oil	
Orig Pub.	: Przem. chem., 1958, 37, No 5, 357-358	
Abstract	: Silicone oils used in the hydrophobization of pharmaceutical glass and in the obtainment of antiadhesive coverings in casting of plastmasses, in vulcanization, and in other forming processes, may be employed in the form of dilute solutions with organic solvents (benzene, toluene, xylene, chloroform, and others). However, it is more economical to use water	

2 A K B 2 E W S h, L.

Hydroxamic Acids. III. Analogs of salicylohydroxamic acid. Janetta Uptonski, Stanislaw Matynowski, Lech Zakrzewski, and Hanna Piotrowska (Inst. Tech. Warsaw, Poland); *Repts. Chem.* 27, 47-53 (1953) (English summary); cf. *ibid.*, 26, 565 (1952); *C.A.* 44, 10912i. The following new hydroxamic acids all possess low oral toxicity and bacteriostatic action on mycobacteria, particularly compds. no. T108 and T139. Salicylohydroxamic acid: 3-Me (T95), m. 149-50°; 4-Me (T97), m. 190-2°; 5-Me (T100), 185°; 3,5-di-me (T112), m. 164-5°; 3-Me (T143), m. 144°. 2-Hydroxy-3-naphthohydroxamic acid (T151), m. 163°. 1-Hydroxy-2-naphthohydroxamic acid (T108), m. 183-92°. 8-Hydroxy-7-quinolinehydroxamic acid (T139), m. 208-9°. Products T95, T97, T100, T112, and T143 were synthesized according to Jean Renaud [*Rev.* 22, 1270 (1859)]; yields for the salicylo derivs. ranged from 35 to 69%. Yields averaged 25% for T108 and T139. Products T151, T108, and T139 were synthesized from NH_2OH in a/c. KOH with the Me esters of the corresponding CO_2H acids.
Clayton F. Holoway

ZAKRZEWSKI M.

POLAND/Physics of Solids - Mechanical Properties of Crystals and E-10
Polycrystalline Compounds

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 3571

Author : Zakrzewski Marek

Inst : Not Given

Title : Plasticity Limit in Steel

Orig Pub : Przegl. mech., 1957, 16, No 6, 227-232

Abstract : No abstract

Card : 1/1

5496

539.557:539.4.011.22/14

Zakrzewski M. On the Problem of the Plasticity Criterion.

"W sprawie kryterium plastyczności", Przegląd Mechaniczny, No. 11, 1957, pp. 432-430.

This article starts with Huber's definition of the plasticity criterion of the quasi-isotropic body and goes on to state that in elastic-plastic and practically isotropic metals the value of the elastic energy of shape changes is the most accurate general measure of stress. A review is then made of the states of stress arising when crystals of various symmetry classes are strained uniformly. A state of strain causing a uniform deformation depends on the crystal structure. The conclusion reached is that Huber's criterion is valid only for polycrystalline quasi-isotropic metals built of crystallites with a regular space lattice. In crystallites of the regular system, the deviator of stressed states disappears, and there are no tangential stresses independently of what direction or angle is chosen. This last effect results from the generalized Hooke's law.

EW
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Adp

ZAKRZEWSKI, M.

On the theory of decohesion; a lecture delivered at the All-Polish Welding Conference in Sopot, May 1959. p. 96.

PRZEGLAD SPAWALNICTWA. (Stowarzyszenie Inzynierow i Technikow Mechanikow Polskich i Instytut Spawalnictwa) Warszawa, Poland. Vol. 11, no. 4, Apr. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

ZAKRZEWSKI, S.

"Infectious diseases in the past and today", p. 8, (ZDROWIE, Vol. 5, No. 8, 1953, Warszawa, Poland)

SO: Monthly List of European Accessions, L.C., Vol. 3, No. 4, April, 1954

ZAKRZEWSKI, Tadeusz (Warszawa)

An outline of the development of the Polish dairy industry. Przem
spoz 15 no.10:39-44 '61.

CZYZEWSKI, Witold, mgr., inż.; ZAKRZEWSKI, Tadeusz, inż.; RONDE, Wladyslaw, technik; PETTKE, Norbert, technik; CYWINSKI, Stefan, inż.; KOZLOWSKI, Tadeusz, technik; CZARNOTA, Zbigniew, technik

Use of cone shaped white cast iron grinders for cement grinding.
Energetyka przem 10 no.3:106-107 '62.

NARITA M., Univ.; SHIMIZU, TOSIYUKA, Marik; SAKURAI, YUKI, Tadomab.

A case of congenital communication between the aorta and the right ventricle through Valsalva's sinus. Radiat. Pol. 35 no. 44639-446. Ap '64.

1. Katedra Histologii i Histopatologii (Kierownik: dr. med. H. Hofman);
2. Zakład Anatomii Patologicznej (Kierownik: dr. K. Borowiczowa);
3. Zakład Histopatologii (Kierownik: doc. dr. med. A. Chrosciel); Instytut Matki i Dziecka w Warszawie (Dyrektor: prof. dr. med. B. Gernicki).

1968-65 EWT(m)/EWP(t)/EWP(b) IJP(c) RDW/JD
 ACCESSION NR: AF5001416

0/0030/64/007/003/1019/1025
 30
 22
 B

AUTHOR: Dziuba, Z.; Zakrzewski, T.

TIME: Electrical and thermoelectrical properties of HgTe in the temperature range of intrinsic conductivity

SOURCE: Physica status solidi, v. 7, no. 3, 1964, 1019-1025

TOPIC TAGS: conduction band, energy gap, intrinsic temperature range, intrinsic conductivity, conductivity, mercury telluride, electric property, mercury telluride thermoelectric property, mobility, Hall constant, electron effective mass

ABSTRACT: Mercury telluride of high purity was used in the investigation. The Hall constant, mobility, and thermoelectric power of the compound were measured in the 20-400K temperature range of intrinsic conductivity. The experimental results are interpreted in terms of a simple parabolic model of the conduction band. The authors found that the energy structure of mercury telluride is between that of a semimetal and a semiconductor. The energy gap E_g at $T = 0$ is $-0.0003 \text{ eV} < E_g < +0.0003 \text{ eV}$, the reduced Fermi level has a constant value of $\eta = 3.2$, and the effective mass of the electrons is $m_n^* = 0.02 m_0$. The most probable scattering mechanisms in HgTe in

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L 29682-65

ACCESSION NR: AP5001416

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the temperature range of intrinsic conductivity are scattering by holes at low temperatures, and scattering by optical phonons at high temperatures. It is noted that the limits of the E^0_g could be estimated with greater accuracy with HgTe samples of higher purity. "The authors thank Professor L. Sosnowski for invaluable guidance and inspiring discussions, Dr. W. Girit and Dr. J. Ginter for their effective help in the investigation, and Docent A. Wolska, Docent J. Kolodziejczak, and Dr. J. Rauluszkiewicz for their critical remarks." Orig. art. has: 17 formulas and 3 figures.

ASSOCIATION: [Dziuba] Institute of Physics, Polish Academy of Sciences, Warsaw;
[Zakrzewski] Institute of Physics, Polish Academy of Sciences, Wroclaw

SUBMITTED: 29Sep64

ENCL: 00

SUB CODE: 1C, EM

NO REF SOV: 002

OTHER: 022

Card 2/2

L 37136-66 FWP(1)/EIT JLP(1) RDW/JB

ACC NR: AP5024759

SOURCE CODE: GE/0030/65/011/002/0873/0876

AUTHOR: Wojtowicz-Natanson, B.; Zakrzewski, T.

79
75
B

ORG: Institute of Experimental Physics, University of Warsaw; Low Temperature Laboratory, Institute of Physics, Polish Academy of Sciences, Wroclaw

TITLE: Temperature dependence of the spectrum of photoluminescence in CdSe crystals

SOURCE: Physica status solidi, v. 11, no. 2, 1965, 873-876

TOPIC TAGS: photoluminescence, exciton, semiconductor carrier, cadmium selenide, monochromator, photomultiplier tube, light polarization, *TEMPERATURE DEPENDENCE, SPECTRAL DISTRIBUTION*

ABSTRACT: The temperature dependence of spectral distribution and total intensity due to exciton recombination in CdSe crystals is investigated. The two absorption maxima are at 0.71 μ and 0.65 μ . The latter band is studied since it is considered that the recombination of excitons bound to ionized acceptor centers leads to the emission of this band. The luminescence of single CdSe crystals, excited by short wave radiation from a high pressure mercury lamp, was analyzed with a glass prism monochromator. A photomultiplier tube served as a detector. The spectral resolution was 0.005 ev. Measurements were carried out in the 300-4.2°K temperature range. Two curves were obtained for the two polarizations of the emitted light. The separation of the curves is 0.024 ev, which, within the margin of experimental error, agrees with the value of

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ACC NR: AP5024759

the energy interval of the two upper valence bands due to the crystal field splitting. Fig. 1 shows the logarithm of intensity S plotted against the inverse of temperature. The slope of the initial rectilinear part is the same for all the CdSe crystals studied but the value of T where the knee-point appears varies for different crystals, indicating that the number of exciton complexes increases with decreasing temperature until saturation occurs. Since the value of the activation energy of the luminescence center equals the sum of the dissociation energy ($E = 0.015$) of the exciton, acceptors probably do not capture excitons in a single act to form complexes, but rather hole and electron are bound successively to an acceptor. The authors express their thanks to Dr. W. Wardzynski for his interest in this work, stimulating discussions and advice; to Professor L. Sosnowski for his kind permission to perform this work in his laboratory; and to Dr. I. Filinski and Dr. W. Gariat for their valuable suggestions. Orig. art. has: 3 figures.

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ACC NR: AP5024759

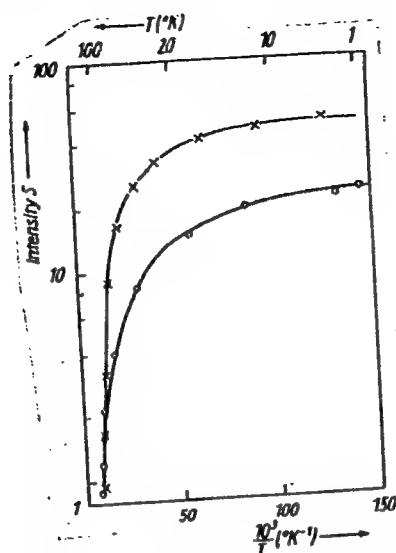


Fig. 1. The temperature dependence of the total energy emitted within the "0.68 μm " band.

SUB CODE: 20/ SUPM DATE: 27Jul65/ ORIG REF: 000/ OTH REF: 006

Card 3/3 af

L 31539-66 EIC(f)/T/EMP(t)/ETI IJP(c) RDW/JD
ACC NR: AP6010792 SOURCE CODE: PO/0053/66/000/003/0111/0117

AUTHOR: Baranowski, J.; Dziuba, Z.; Galazka, R.; Giralat, W.; Szymanska, W.
Zakrzewski, T.

ORG: Institute of Experimental Physics, Warsaw University (Instytut Fizyki Doswiadczal-
nej Uniwersytetu Warszawskiego); Physics Institute, PAN (Instytut Fizyki, PAN)

TITLE: Electrical and photomagnetic properties of single crystals of the $Cd_xHg_{1-x}Te$
semiconductor system

SOURCE: Przegląd elektroniki, no. 3, 1966, 111-117

TOPIC TAGS: single crystal, crystal property, semiconductor crystal, electric property,
photomagnetic effect

ABSTRACT: The paper presents some results of investigations on the $Cd_xHg_{1-x}Te$ system. Single crystals of $x = 0.00, 0.05, 0.10$, and 0.15 were used for the investigations. The dependence of electrical conductivity δ and the Hall constant R_H on temperature in the range from $4.2K$ to $400K$ was investigated. The dependence of R_H and δ on magnetic field intensity was also measured. The materials investigated show a high electron mobility; the maximal values of electron mobilities are of the order of $10^5 \text{ cm}^2/\text{Vsec}$. Mobility increases with increasing x and attains its maximum values for x at about 0.1 . In these materials, at temperatures below room temperature there is a very strong dependence of R_H and δ on magnetic field intensity. It was determined that for $x = 0.00$ the width of the forbidden energy gap at the temperature of absolute zero is $E_g = 0 \pm 0.0003 \text{ eV}$. For $x > 0$, $E_g > 0$, and $x = 0.05$ it is $E_g = 0.015 \text{ eV}$.

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ACC NR: AP6010792

and for $x = 0.15$, $E_g = 0.06$ eV. The photomagnetic effect was investigated at room temperature. High sensitivity to infrared radiation was established. The material with $x = 0.10$ is sensitive to radiation from the visible range to wavelength of 10 microns. It was also established that the photomagnetic effect for $x = 0.10$ depends on the frequency of incident radiation. This dependence is caused by the appearance of a thermal component (Nernst effect). The experimental results are presented in the form of curves and compared with published data. The results are discussed in detail in the light of existing literature. The authors thank Prof. L. Sosnowski for his interest in this work and discussions. The authors also thank Docent Dr. W. Wardzynski, J. Ginter, Dr. J. Mycielski, and Dr. J. Rauluszkiewicz for valuable comments they made in the course of this investigation. Orig. art. has: 7 figures.

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 006 / SOV REF: 002

Card

2/2 LC

ZAKRZEWSKI, Tadeusz

Diagnosis of sciatica; symptoms in sciatica. Wiadomosci lek. 7
no.1:48-53 Jan 54,
(SCIATICA, manifestations,)

ZAKRZEWSKI, Tadeusz

Selected problems from practical neurology: paralysis of the facial nerve, short lasting unconsciousness. Wiadomosci lek. 7 no.12: 623-727 Dec 54.

(PARALYSIS

facial nerve, classif. & ther.)

(NERVES, FACIAL, paralysis

classif. & ther.)

(CONSCIOUSNESS

unconsciousness, short lasting)

ZAKRZEWSKI, Tadeusz

Problems of practical neurology; diagnostic value of pupil examination. Wiadomosci lek. 8 no.4, 163-167 Apr '55.

(CENTRAL NERVOUS SYSTEM, diseases

diag., value of pupil exam.)

(PUPILS, in various diseases

CNS dis., diag. value of exam.)

WRZESNIEWSKI, Zdzislaw; BORSUKOWSKI, Wladyslaw; BORTNIK, Pawel;
ZAKRZEWSKI, Tadeusz

Application of neuroplegic drugs and of physical hypothermia
in a case of severe cerebrocranial injury. Polski tygod. lek.
11 no.39:1675-1678 24 Sept 56.

1. (Z Oddzialu Chirurgicznego Wojskowego Szpitala Lotniczego)
adres: Warszawa, al. Na Skarpie 65 m. 9.

(HIBERNATION, ARTIFICIAL,

in head inj. (Pol))

(HEAD, wounds and injuries,

ther., artif. hibernation (Pol))

LODZINSKI, Kazimierz; SWIDERSKI, Jerzy; ZAKRZEWSKI, Tadeusz

Attempted examination of children in shock due to burns by a polygraphic method. *Pediat. pol.* 37 no.7:687-692 JI '62:

1. Z Kliniki Chirurgii Dziecięcej Kierownik: prof. dr med. W.Poradowska
i z Zakładu Fizjopatologii Instytutu Matki i Dziecka w Warszawie
Kierownik: doc. dr med. A.Chroscicki Dyrektor: prof. dr med. B.Gornicki.
(BURNS in inf & child) (SHOCK in inf & child)

POLAND

ZAKRZEWSKI, Tadeusz [Affiliation not given]

"'Neurologia dla Lekarza Szkolnego' (Neurology for the School Physician) by Toofan DOMZAL," Warsaw, 1962."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 30, 22 Jul 63, p 1119

Abstract: Book review of the monograph listed in the title. The reviewer discusses the book from the standpoint of a guide for school physicians in relation to various diseases of school children, and finds the selection of topics lacking. In his opinion, it is however an addition to the physician's library, to the extent covered by the author. There are no references.

1/1

JASKIEWICZ, Arkadiusz- ZAKRZEWSKI, Tadousz

Thermal processes in barium titanate. Matem fizyka astronom
Wroclaw 3:159-165 '62.

1. Laboratory of Low Temperatures, Institute of Physics,
Polish Academy of Sciences, Wroclaw Branch.

BIELOWICZ, A.; BOGUNIL-OCZEKOWSKA, Maria; KRUKOWA, Anna; ZAKRZEWSKI, T.

Combined congenital cardiac defects with rectal atresia. Ped.
Pol. 40 no.1:91-94 Ja '65

1. z Kliniki Chirurgicznej (Kierownik: prof. dr. med.
W. Poradowska); z Zakładu Fizjopatologii (Kierownik: dr. med.
J. Swiderski); z Kliniki Niewowlecej (p.o. Kierownika dr. med.
H. Hofman); z Zakładu Rentgenodiagnostyki (Kierownik: doc. dr.
med. S. Kubicz) oraz z Zakładu Anatomii Patologicznej (Kierownik:
dr. med. K. Borowicz) Instytutu Matki i Dziecka w Warszawie
(Dyrektor: prof. dr. med. B. Gorniski).

ZAKRZEWSKI, Z.

Property tests of varactor diodes in the centimeter wave range.
Przem inst telekom prace 13 no.42/43:61-67 '63.

1. Technical University, Gdansk.

ACCESSION NR: AT4023928

P/2507/63/013/42/0061/0067

AUTHOR: Zakrzewski, Z. (Zakshevski, Z.)

TITLE: Analysis of varactor diode properties in centimetric wave range

SOURCE: Warsaw. Przemyslowy Instytut Telekomunikacji. Prace, v. 13, no. 42-43, 1963

TOPIC TAGS: varactor, varactor diode, varactor property, centimetric wave, diode, semiconductor, microwave impedance measurement, transmission line discontinuity

ABSTRACT: The method of an evaluation of equivalent circuit elements of a varactor diode in the range of microwaves is given. The investigated diode is placed in a detecting head and an input impedance of the head is measured. The Mittra method of the investigation of transfer impedance is used to define the properties of the p-n junction. The described method takes into account the head losses. The results are obtained quickly without the necessity for making time consuming calculations. The polarized voltage regulation presents no difficulties. The method is particularly useful in the case of studying with one frequency many diodes of

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ACCESSION NR: AT4023928

identical construction. The measurement of varactors has been carried out by the author in the 10 cm band.

ASSOCIATION: Politechnika Gdanaka (Danzig Polytechnic)

SUBMITTED: 09Feb63

DATE ACQ: 09Apr64

ENCL: 01

SUB CODE: GE, CO

NO REF SOV: 000

OTHER: 004

Card 2/3

ACCESSION NR: AT4023928

ENCLOSURE: 01

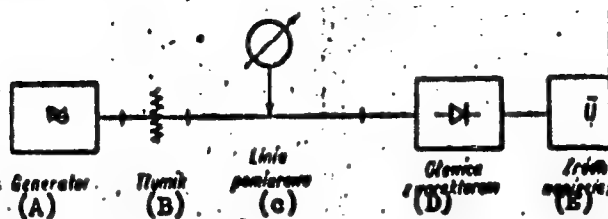


Fig. 1 Diagram of the measuring apparatus

A- generator

B- attenuator;

C- measuring line;

D- head with varactor;

E- voltage source

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ZAKRZEWSKI, Z.

From the achievements of the leading milling combines in the
Soviet Union. p. 28.

GOSPODARKA ZBOZOWA, Vol. 7, no. 2, Feb. 1956.

POLAND

SOURCE: EAST EUROPEAN ACCESSIONS LIST LC Vol. 5, no. 7, August 1956.

ZAKRZEWSKI, Z.

ZAKRZEWSKI, Z. The research works of the All-Union Grain Institute in Moscow. p. 9.

Vol. 7, no. 7, July 1956
GOSPODARKS ZBOZOWA
AGRICULTURE
Warszawa, Poland

So: East European Accession, Vol. 6, no. 2, Feb. 1957

ROLSKI, Stanislaw; ZAKRZEWSKI, Zdzislaw

Preparation of protein hydrolysates for parenteral administration by means of acid hydrolysis. Acta pol. pharm. 19 no.5:421-425 '62.

1. Z Katedry Chemii Farmaceutycznej Akademii Medycznej w Warszawie
Kierownik: prof. dr S. Rolski.
(PROTEIN HYDROLYSATES) (CHEMISTRY, PHARMACEUTICAL)

P/521/62/000/009/002/005
E032/E514

AUTHOR: Zakrzewski, Zenon (Gdańsk)

TITLE: Electrical parameters of plasma in a very high frequency electromagnetic field

SOURCE: Polska Akademia Nauk. Instytut Maszyn Przeplywowych. Prace. no.9, 1962, 15-30

TEXT: This theoretical paper is concerned with the propagation of VHF electromagnetic waves in plasma in the case of electron densities below 1%, so that electron-electron and electron-ion collisions may be neglected in comparison with electron-atom collisions. A further simplification involves the neglect of ion currents as compared with electron currents. The plasma is assumed to be uniform and occupying all space. The first section deals with a case where there is no constant magnetic field and an analysis of Maxwell's equations is carried out leading to expressions for the permittivity of plasma, the attenuation constant as a function of electron density and frequency, and the phase constant as a function of the electron density. It is shown that the wave will not propagate if the
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Electrical parameters of plasma ... P/521/62/000/009/002/005
E032/E514

wave pulsance is less than the pulsance of the electrons about their mean positions. The plasma will therefore act as a filter. When the electron-atom collision frequency is zero there is a discontinuous cut-off frequency, but as the collision frequency increases the cut-off frequency is approached more and more gradually. The second section deals with VHF waves in a plasma placed in a constant magnetic field. Two special cases are considered: the propagation along and at right-angles to the constant magnetic field. Again the filter properties of plasma are established and it is shown that in this case there is more than one cut-off frequency. Throughout the analysis the plasma is looked upon as a linear medium, i.e. it is assumed that the electromagnetic fields are not strong. There are 8 figures and 2 tables.

SUBMITTED: June, 1961

Card 2/2

POL . USSR .

✓ The manufacture and pharmacodynamics of alkaloids from *Veratrum album*. S. Roski, I. Małcherzyk, I. Szlomska, and Z. Zakrzewski (Chem. Med. Akad., Warsaw). *Acta Polon. Pharm.* 11, 229-41 (1964) (English summary).— Alkaloids with hypotensive activity were obtained from the rhizomes of *V. album*. The dry material was treated with aq. NH_3 and extd. with C_6H_6 . The ext. was acidified with 5% AcOH to pH 5-6. The aq. layer was sepd. and neutralized with 10% aq. NH_3 , followed by repeated extn. with MeOH . $[\alpha]_D^{25}$ -91° (c 0.62, MeOH), R_{90} 1.71, some unchanged III, and *rolatodine rhamaoglucoside* $\text{C}_{20}\text{H}_{31}\text{NO}_{11}$, $1\frac{1}{2}\text{H}_2\text{O}$, m. 240-5° (decompn.) (from aq. MeOH). $[\alpha]_D^{25}$ -100° (c 0.53, MeOH). David Stefany.

ZAKRZEWSKI, Z.

AGRICULTURE

Periodicals: ZAGADNIENIA EKONOMIKI ROLNEJ. No. 4, 1958

ZAKRZEWSKI, Z. Some problems of the grain monopoly in Poland. p. 3.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, No. 2,
February 1959, Unclass.

POLAND/Organic Chemistry - Naturally Occuring Substances and
Their Synthetic Analogs.

G-3

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 14647.

Author : Zakrzewski Zdzislaw

Inst :

Title : Chemistry of the Alkaloids of Hellebore.

Orig Pub: Farmac. polska, 1957, 13, No 3, 61-66.

Abstract: A review.

Card : 1/1

ZAKRZEWSKI, Zygmunt, inż.

Construction of farmhouses for municipal agricultural supervisors in 1961.
Budown wiejskie 14 no.3:12-14 Mr '62

L 42021-65 EAT(d)/EAT(1)/EEC(k)-2/EPF(n)-2/ENG(m)/EEC-4/EPA(w)-2 Pg-4/P1-4/
PK-4/P1-4/Po-4/Pq-4/Pz-6/Pab-10 IJP(c) AT/WR

ACCESSION NR: AT5007772

P/2521/64/000/021/0003/0022

AUTHOR: Zakrzewski, Z. (Gdansk)

TITLE: Some possibilities of measuring the electrical parameters of plasma using
microwaves

SOURCE: Polska Akademia Nauk. Instytut Maszyn Przeplywowych. Prace, no. 21, 1964,
3-22

TOPIC TAGS: plasma, plasma electrical property, microwave radiation, dielectric
constant, electron collision frequency, electron concentration, attenuation meter, phase
shift meter

ABSTRACT: The paper discusses the transmission method of measuring the electrical
parameters of plasma; this method consists of measuring and analyzing the attenuation
and phase shift of microwave radiation during its passage through a layer of plasma.
The theory of the electrical parameters of plasma (complex dielectric constant, electron
collision frequency, electron concentration) is presented and appropriate formulas for the
parameters are derived. The dependence of the relative dielectric constant of plasma on
collision frequency and electron concentration is graphically depicted. The phenomena
occurring during the passage of an electromagnetic wave through a layer of homogeneous
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ACCESSION NR: AT5007772

plasma are analytically investigated and the formulas for the attenuation and phase shift of the transmitted wave are derived. A system, shown in Fig. 1 of the Enclosure, for attenuation and phase shift measurement in plasma is described. The methods of determining the electron concentration and the electron collision frequency in plasma are also discussed. It is concluded that in the general case, such determinations involve intricate computations or the use of special normalized plots of the transmission coefficient. An analysis of possible simplifications of the interpretation of the experimental results for the case when the concentration of electrons in plasma is lower than the critical concentration and when the frequency of the transmitted radiation is well above the collision frequency is given. A number of graphs simplifying the computations are also given. The analysis is extended to the case of inhomogeneous distribution of electron concentration in the direction of wave transmission. The results obtained make it possible to compute the collision frequency and the mean concentration of electrons in such a plasma. A method is also developed for estimating the maximum concentration of electrons in a layer having an arbitrary distribution of electron concentration. The application of the method is limited to static measurements where controlling the position of the attenuator and phase shifter by hand is sufficient. It can be used, however, for dynamic measurements

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ACCESSION NR: AT5007772

after some modification of the measuring device. The range of the measured concentration and the frequency of electron collisions depends on the accuracy of measuring the attenuation and phase shifting of the microwave radiation as well as on the thickness of the plasma layer and the microwave wave frequency. Orig. art. has: 10 figures and 73 formulas.

ASSOCIATION: Instytut Mazyn Przeplywowych, Polska Akademia Nauk (Institute of Flow Machines, Polish Academy of Sciences)

SUBMITTED: 02Jul63

ENCL: 01

SUB CODE: ME, EC

NO REF SOV: 002

OTHER: 004

Card 3/4

21033

S/058/61/000/005/037/050
A001/A101

9.3120(1003,1137,1140)

AUTHORS: Lepeshinskaya, V.N., Borisov, V.L., Zakrevskiy, V.A.

TITLE: The dependence of the coefficient of secondary electron emission on the incidence angle of primary electrons

PERIODICAL: Referativnyy zhurnal. Fizika, no.5, 1961, 323, abstract 5Zh15
("Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t", 1960, no 3, 79 - 83)

TEXT: The authors derived the expression for the coefficient of secondary electron emission ϵ depending on the incidence angle of primary electrons φ under the following assumptions: 1) the path of primary electrons in a solid is rectilinear; 2) the number of excited electrons is proportional to the energy lost by the primary electron; 3) the relation between the range of the primary electron in a solid and its energy is linear; 4) distribution of secondary electrons in the spot of their origination is isotropic; 5) secondary electrons in a solid do not suffer scattering; 6) absorption of secondary electrons proceeds according to an exponential law; 7) probability of escape of the secondary electron which

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21033

The dependence of the coefficient ...

S/058/61/000/005/037/050
A001/A101

reached the surface does not depend on its energy. The course of the theoretical curve $\sigma(\varphi)$ agrees satisfactorily with the course of the experimental relation for alloy CuBe plotted according to data of H. Salow ("Phys. Z.", 1940, v 41, 434). There are 18 references.

[Abstracter's note: Complete translation.]

Card 2/2

MODEL', A. (Leningrad); ZAKREVSKIY, V. (Leningrad)

Device with a measuring bridge. Radio no.3:37-39 Mr '61.
(MIRA 14:8)

(Transistors--Testing)

54130

1043

25098
S/181/61/003/009/032/039
B108/B138

+

AUTHORS: Zhurkov, S. N., Tomashevskiy, E. Ye., and Zakrevskiy, V. A.

TITLE: Study of macroradicals formed in mechanical destruction of polymers

PERIODICAL: Fizika tverdogo tela, v. 3, no. 9, 1961, 2841-2847

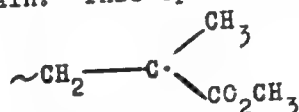
TEXT: This is a study of the electron paramagnetic resonance spectra observed during the mechanical destruction in a high vacuum of such polymers as polymethyl metacrylate, polystyrene, polyvinyl acetate, etc. For this purpose the authors devised an electron paramagnetic resonance spectrometer with crystal detector which operated with a high-frequency modulated magnetic field. H_{011} vibrations were excited in a liquid-nitrogen cooled cylindrical resonator (Ref. 7: N. N. Bubnov, A. G. Semenov. PTE, no. 1, 92, 1959). In this resonator were placed the specimens and a special device to cut shavings from the polymers in a vacuum of 10^{-5} - 10^{-6} mm Hg. The sensitivity of the spectrometer was about $5 \cdot 10^{11}$ spins. The paramagnetic absorption signal was amplified Card 1/4

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S/181/61/003/009/032/039
B108/B138

Study of macroradicals formed in ...

on modulation frequency and, after phase detection, was observed on an oscilloscope. The spectrum of polymethyl metacrylate shavings at room temperature consisted of five equidistant lines splitting of 23 coated and four weaker intermediate lines. At low temperature, the essential shape of the spectrum was the same. The central part, however, was slightly asymmetric. When the sample was heated up to room temperature, the normal spectrum appeared again. This spectrum corresponds to the radical



in which the free electron interacts with one or two of the four β -protons. After repeated cooling the low-temperature spectrum does not appear again. This is due to a second, more active radical $\text{R}_1-\text{C}(\text{H})-\text{R}_2$ which vanishes

when heated. The free electron in this radical interacts with one proton only. Polystyrene shows a weak spectrum at low temperatures. This

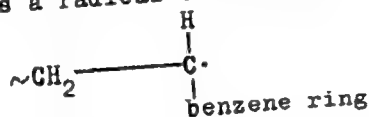
Card 2/4

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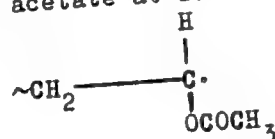
S/181/61/003/009/032/039
B108/B138

Study of macroradicals formed in ...

spectrum indicates a radical of the shape



in which the free electron may interact with the hydrogen atoms of the chain or with those of the benzene ring. A clear triplet appears in the case of polyvinyl acetate at low temperature. The radical ascribed to this triplet is



where the free electron weakly interacts with one of the protons of the methylene group. The presence of oxygen at room and at low temperature leads to a peroxidation of the radicals. A. Ya. Savostin is thanked for assistance. There are 6 figures and 15 references: 5 Soviet and 10 non-Soviet. The three most recent references to English-language

Card 3/4

Study of macroradicals formed in ...

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S/181/61/003/009/032/039
B108/B138

publications read as follows: M. C. R. Symons. J. Chem. Soc., 277, 1959.
R. Florin et al., Trans. Farad. Soc., 56, 1304, 1960. D. W. Ovenall,
J. Polymer Sci., XLI, 199, 1959.

ASSOCIATION: Fiziko-tekhicheskiy institut im. A. F. Ioffe AN SSSR
Leningrad (Physicotechnical Institute imeni A. F. Ioffe of
the AS USSR, Leningrad)

SUBMITTED: May 26, 1961

Card 4/4

L 10708-65 EWT(m)/EPF(o) ZWP(j) Pc-4/Pr-4 AEDC(b)/RAEM(c)/ASD(a)-5/
ESD(gs)/ESD(t)/SSD/RAEM(1)/AFWL/AS(mp)-2/RPL RM

ACCESSION NR: AP4044676

S/0120/64/000/004/0102/0104

AUTHOR: Zakrevskiy, V. A.; Tomashevskiy, E. Ye.

TITLE: Electron-paramagnetic resonance spectrometer for the 8-mm band

SOURCE: Pribery* i tekhnika eksperimenta, no. 4, 1964, 102-104

TOPIC TAGS: spectrum analyzer, electron paramagnetic resonance, spectrometer, resonator, Q factor, magnetic field modulation, unpaired electron, EPR, EPR spectrometer

ABSTRACT: An electron-paramagnetic resonance spectrometer, with direct detection and hf modulation of the magnetic field operating in the 36-Gc range, is described. The basic structural elements of this instrument are as follows: a cylindrical reflex resonator generating H_{001} -mode oscillations is enclosed in one arm of a waveguide bridge. The height and diameter of the resonator are identical (11 mm), which insures maximum Q for a given mode of oscillation.

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ACCESSION NR: AP4044676

Ampoules with the matter under study are placed through a 2.5-mm aperture in the resonator wall, which results in a loaded resonator Q of 4×10^3 . A weak modulating field is formed by a loop placed inside the resonator. Voltage for the modulation coil and reference voltage for the phase detector of the signal amplifier is supplied from the modulator (see Fig. 1 of the Enclosure). It consists of a quartz-crystal master oscillator, a power amplifier, a phase-shifter, an a reference-voltage amplifier. The EPR signal amplifier and klystron tuning circuitry are basically the same as in existing 3-cm spectrometers. A magnetic field intensity of ~ 13 koe is attained by an iron-clad electromagnet with a 17-mm gap. The spectrometer sensitivity was evaluated by analyzing the EPR spectrum produced in a standard sample of solid DFG (Diphenylpicryldrazil) containing a small number of unpaired electrons. The amount of paramagnetic material was determined by estimating the crystal's dimensions under a microscope and by recording its EPR signal in the 3-cm band with a spectrometer of known sensitivity. The signal-to-noise ratio shows that the sensitivity of the spectrometer described is better than

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L 10708-65

ACCESSION NR: AP4044676

$3 \cdot 10^{-13}$ mol DFPG, i.e., approximately an order better than in similar 3-cm band spectrometers. Orig. art. has: 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR (Institute of Physical Engineering, AN SSSR)

SUBMITTED: 17Sep63

ATD PRESS: 3115

ENCL: 01

SUB CODE: NP, OP

NG REF SOV: 004

OTHER: 001

Card 3/4

S/0181/64/006/006/1912/1914

ACCESSION NR: AP4039695

AUTHORS: Zhurkov, S. N.; Zakrevskiy, V. A.; Tomashevskiy, E. Ye.

TITLE: The formation of free radicals during rupture and deformation of polymers containing sulfide bonds

SOURCE: Fizika tverdogo tela, v. 6, no. 6, 1964, 1912-1914

TOPIC TAGS: free radical, polymer, electron paramagnetic resonance, cross link, PE 1301 radiospectrometer, rubber, albumin, Thiokol

ABSTRACT: The authors present data on a number of synthetic and natural polymers with sulfur cross links: vulcanized rubber (ebonite and cured rubber from natural rubber), Thiokol, and cystine-bearing albumin (horn and hair). The EPR spectra of all samples were recorded on a standard PE-1301 radiospectrometer with 3-cm range. During mechanical rupture all the indicated polymers exhibited a characteristic asymmetrical EPR spectrum, as shown in Fig. 1 on the Enclosure. The authors believe that this EPR spectrum must be due to radicals of the type R--S, formed by rupture of relatively weak C--S and S--S bonds. In Thiokol the observed EPR signal may be caused either by rupture of the cross link or by rupture of the sulfide bonds in

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ACCESSION NR: AP4039695

the macromolecules (probably by both). Heating of a compressed sample of ebonite to room temperature (from the temperature of liquid nitrogen), led to a noticeable relaxation of deformation and to a decrease in the number of detected radicals. The number of free radicals may change either as a consequence of restoration of ruptured chemical bonds or through a change in conditions of stability of the free radicals in the polymer, causing a relaxation in the size of the sample. Orig. art. has: 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad
(Physicotechnical Institute AN SSSR)

SUBMITTED: 11Feb64

ENCL: 01

SUB CODE: MT

NO REF SOV: 004

OTHER: 003

Card 2/3

ACCESSION NR: AP4039695

ENCLOSURE: 01



Fig. 1. EPR spectrum of mechanically ruptured polymers with sulfide bonds.

Card 3/3

ZAKREVSKIY, V.A.; TOMASHEVSKIY, E.Ye.

An 8-mm. electron paramagnetic resonance spectrometer. Prib. i
tekh. eksp. 9 no.4:102-104 J1-Ag '64. (MIRA 17:12)

1. Fiziko-tekhnicheskiy institut AN SSSR.

ZAKREVSKIY, V.F.

Block thawing by flue gases. Der.prom.4 no.5:26-27 My'55.
(MIRA 8:10)

1. Spichechnaya fabrika "Mayak"
(Match industry) (Waste heat)

ZAKREVSKIY, V.F., inzhener.

Longitudinal chain conveyer on pontoons. Der. prom. 6 no.4:24
Ap '57. (MIRA 10:6)

1. Spichechnaya fabrika "Mayak".
(Lumber--Transportation)

GRIGOR'YEV, V.V.; ZAKREVSKIY, V.S.; BURNYKH, V.S.; KOBTSSEV, A.F.; TKACHENKO, M.F.

Hydraulic efficiency of Donets gas pipelines. Gaz. delo no.2:
25-29 '64. (MIRA 17:9)

1. Donetskoye upravleniye magistral'nykh gazoprovodov i Ukrainskiy
filial Vsesoyuznogo nauchno-issledovatel'skogo instituta prirodnogo
gaza.

ACCESSION NR: APL047057

S/0286/64/000/018/0058/0058

AUTHOR: Zakrevskiy, Ye. S.

TITLE: A gauge for measuring the level and the density of liquids. Class G,
No. 165322

SOURCE: Byul. izobr. i tovar. snakov, no. 18, 1964, 58

TOPIC TAGS: liquid level, liquid density, induction gage, manometer

ABSTRACT: This Author Certificate introduces a gauge for measuring the level and the density of liquids contained in vessels, under pressure or in vacuum. The gauge (see Fig. 1 on the Enclosure) contains a membrane and a siphon connected to an induction gauge. To increase the accuracy of a measurement, the sensitive element of the level and density gauge is made to form a manometric system consisting of a container and a manometric spring supporting the core of the induction gauge. Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 12Mar62

SUB CODE: IE, ME
Card 1/2

NO REF SOV: 000

ENCL: 01
OTHER: 000

ZAKREVSKIY, Ye.S.

Remote control of a beet gate valve in the Lenin Sugar Factory.

Sakh.prom. 34 no.11:37-38 N '60.

(MIRA 13:11)

1. Sakharnyy zavod imeni Lenina.

(Sugar manufacture) (Remote control)

ZAKREVSKIY, Ye.S.

Automatic level control in the evaporation plants. Sakh.
prom. 36 no.7:35-39 JI '62. (MIRA 17:1)

1. Zavod "Sakhavtomat".

ZAKREVSKIY, Ye.S. [Zakrevs'kyi, IE.S.], inzh.

Apparatus for continuous determination and regulation of the
density of liquids. Khar.prom. no.1:12-18 Ja-Mr '62.
(MIRA 15:8)
(Densitometers) (Sugar industry--Equipment and supplies)

ZAKREVSKIY, Ye.S.

Pressure regulator of the diffusion unit of the Lenin Sugar
Factory. Sakh. prom. 35 no. 1:37-38 Ja '61. (MIRA 14:1)

1. Sakharney zavod imeni Lenina.
(Sugar manufacture)

ZAKREVSKIY, Ye.S.

Automatic densitometer for sugar sirup. Sakh.prom. 34 no.9:
38-44 S '60. (MIRA 13:9)

1. Sakharnyy zavod imeni Lenina.
(Densitometers)

ANBINDER, Ya.Ye. [Anbinder, IA.IE.]; SHPAKOVSKIY, N.Ye. [Shpakovs'kyi, N.E.];
DARBINYAN, S.A.; KOMAROV, V.V.; KOMAROVA, T.V.; KOZLOV, Yu.A.; KONKOTIN,
L.P.; ZEREKIDZE, V.M.; SHULYATITSKIY, S.M. [Shyliatyts'kyi, S.M.];
KHODURSKIY, Ye.A. [Khodurs'kyi, IE.A.]; OBUSHINSKIY, Ye.I. [Obushyns'kyi,
IE.I.]; GVOZDIK, A.A. [Hvozdyk, A.A.]; NIKITINA, M.A.; LUPASHKO, N.F.;
BESKROVNYI, M.N.; TSIMBLER, M.Ye. [TSymbler, M.IE.]; ILYN, A.N.; TOTADZE,
P.M.; ZHIGURS, Kh.Yu.; ZAKREVSKIY, Ye.S. [Zakrevs'kyi, IE.S.];
FEDOROVICH, A.G. [Fedorovych, A.H.]; CHALENKO, D.K.; KHOMUTOV, D.A.;
SKURIKHIN, I.M.; NILOV, V.I.; YEFIMOV, B.N. [IEfimov, B.N.]; KAZANOVSKIY,
V.S. [Kazanovs'kyi, V.S.]; ZOTIKOV, L.S.; KOCHURENKO, M.A.

Soviet certificates of invention. Khar. prom. no.2:57-59 Ap-Je '65.
(MIRA 18:5)

L 24699-65 EWP(a)/EWT(m) WH

ACCESSION NR: AP4048872

S/0185/64/009/010/1150/1151

AUTHOR: Brodin, M. S.; Vatul'ov, V. M.; Zakrevs'ky*, S. V. 12/11/10

TITLE: Luminescence appearing in crystals of sodium uranyl acetate irradiated by a ruby laser beam

SOURCE: Ukrayins'ky* fizy*chny*y zhurnal, v. 9, no. 10, 1964, 1150-1151

TOPIC TAGS: nonlinear effect, crystal irradiation, crystalline powder irradiation, crystal irradiation with laser, crystal luminescence, ruby laser beam

ABSTRACT: The high intensity of laser beams makes it possible to observe and investigate a series of nonlinear effects. It also makes the observation of luminescence possible when a substance becomes transparent to the frequency of the exciting light. To investigate nonlinear effects, sodium uranyl acetate single crystals and crystalline powders were irradiated with the focused beam of a ruby laser and the luminescence spectra were

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L 24699-65

ACCESSION NR: AP4048872

photographed. Irradiation of crystals with a focused laser beam caused the formation of cavities or through-holes. The destruction of the crystals may be due to mechanical forces or to thermal effects. One may conclude that the line-structured single-crystal spectrum is associated with laser excited luminescence resulting from two-photon absorption or absorption of light of another harmonic. It also is possible that this spectral structure is due to luminescence of several defect centers which are formed when the crystal is irradiated by a laser beam. Large overlapping of absorption and luminescence spectra in the case of a single crystal can be associated with the fact that a crystal region which radiates is heated to a high temperature, or that luminescence is superposed by radiation with a continuous spectrum which penetrates through a layer of crystal. Orig. art. has: 1 figure.

ASSOCIATION: Instytut Fizyki* AN USSR, Kiev (Institute of
Physics, AN USSR)

Card 2/3

L 24699-65

ACCESSION NR: AP4048872

SUBMITTED: 18Jun64

ENCL: 00

SUB CODE: EC, OP

NO REF SOV: 001

OTHER: 002

Card 3/3

L 21392-66 FBD/EWT(1)/EWP(g)/EWT(m)/EEC(k)-2/ETC(f)/EWG(m)/T/EWP(t)/EWP(k)/EWA(h)
 ACC NR: AP6009073
 IJP(c) WG/RDW/JD/VH
 SOURCE CODE: UR/0185/66/011/003/0344/0345

AUTHOR: Brodin, M. S.; Vytrykhovs'kyi, M. I.; Zakrevs'kyi, S. V.; Reznichenko, V. Ya.

ORG: Physics Institute, AN URSR (Instytut fizyky AN URSR); Institute of Semiconductor Physics, AN URSR, Kiev (Instytut napivprovidnykiv AN URSR)

TITLE: Laser-type emission by CdS-CdSe crystals by means of ruby-laser two-photon excitation

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 11, no. 3, 1966, 344-345

TOPIC TAGS: mixed crystal, luminescent crystal, laser pump, laser pumping

ABSTRACT: Investigations were made of the emission of CdS-CdSe mixed crystals pumped by a ruby-laser two-photon mechanism to determine the possibility of laser generation. Three-component CdS-CdSe crystals with 28, 37, 63% CdSe were investigated. Their forbidden gap widths at 77K were 2.24, 2.28, and 2.02 eV, respectively. The crystals were cut as rectangle parallelepipeds with accurately polished plane-parallel faces. Their thickness varied from 1 to 2.5 mm. Thin single-crystal plates with thickly grooved faces were also investigated. Specimens cooled to 77K were excited by single pulses from a ruby laser. The pump power density varied from 10 to 100 Mw/cm^2 . The emission spectra were photographed with a spectrograph. One narrow band located close to the absorption edge was observed in the luminescence spectra of all crystals at two-photon excitation. The band was sharply polarized in the direction perpendicular to the hexagonal axis c. The width of the band in the

L 21392-66

ACC NR: AP6009073

case of massive crystals with plane-parallel faces decreased when the pumping was increased. At maximum pumping it becomes $10-15 \text{ cm}^{-1}$. Under the same pumping conditions the width of the band of imperfect lamina was considerably larger, approximately $80-100 \text{ cm}^{-1}$. The intensity at the maximum of the band increased, when the pump force increased and at a pump force density of 100 Mw/cm^2 it became quite large. At sufficiently high pumping, the emission of crystals with plane-parallel faces had a directed character. For a $\text{CdS}_{0.72}-\text{CdSe}_{0.28}$ crystal 1 mm thick, the divergence of the beams was 3° . A value of $5-7 \text{ cm}^{-1}$ was obtained for the coefficient of two-photon absorption at a maximum density of the laser emission force at which the crystal is still intact. Orig. art. has: 1 figure. [JA]

SUB CODE: 20/ SUBM DATE: 27Dec65/ ORIG REF: 004/ ATD PRESS: 4221

Card 2/2

SZYMANOWSKA, Zofia; POSZWINSKI, P.; MURAWSKI, K.; ZAKREWSKI, K.

Human serum albumins in starch-gel electrophoresis. Acta biochim.
polon. 9 no.2:183-188 '62.

1. Department of Biochemistry and the Blood Derivatives Division,
Institute of Haematology, Warszawa.
(SERUM ALBUMIN chem) (ELECTROPHORESIS)

ZAKREWSKI, Tadeusz

Selected cases from practical neurology; painful muscle spasms,
anxiety conditions, and glutamic acid. Wiadomosci lek. 8 no.1:

25-28 Jan 55

(CRAMP,) (NEUROSES, ANXIETY,)

(GLUTAMATES, therapeutic use,)

Zakrillayev, F.

USSR/General Section - Problems of Teaching.

A-5

Abs Jour : Referat Zhur - Fizika, No 1, 1958, 76
Author : Zakrillayev, F.
Inst :
Title : Solution of Certain Problems in Physics.
Orig Pub : Sovet maktabi, 1957, No 4, 34-36
Abstract : No abstract.

Card 1/1

BB

A-4

Action of cardiovascular drugs during anaphylaxis. E. S. ROZENCWART and S. P. ZAKHAROVNA. (Mik. exp. Uslov., 1966, No. 9/1, 161-161).—During anaphylaxis the dose the response to adrenalin is diminished; and the tonic action of drophenin is more pronounced; changes in response to histamine were inconsistent. (Cm. Ass. (p))

ASB-36A METALLURGICAL LITERATURE CLASSIFICATION

RECEIVED

CIA-RDP86-00513R001963620013-0"

ZAKRIVDOROGA, S. P.

"Experimental Investigations of the Pharmacology of Barbiturates, Hexenal and Eirpan-Sodium," Farmakol. i Toksikol., 5, No.3, 1942.

Chair Pharmacology, 1st Med. Inst.

1ST AND 2ND GROUPS																										3RD AND 4TH GROUPS																										5TH AND 6TH GROUPS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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<p>RELATIONS BETWEEN CHEMICAL CONSTITUTION AND PHARMACOLOGICAL EFFECTS OF BARBITURIC ACID DERIVATIVES. S. P. Zakrivkova. <i>Farmatol. i Toksikol.</i> 7, No. 4, 7-11 (1944).--Amination of 5-alkylbarbituric acids does not yield soporifics; neither does conversion of thio-barbituric acid to sulfide type derivs. In speed and intensity of soporific effect, and also in toxicity, 5-propyl-5-furfuryl-barbituric acid ranks higher than barbital; the corresponding thio compd. is soporific but highly toxic. Propylcyclohexylbarbituric acid has first a stimulating and then a slight, transient, soporific effect on white mice. The activity of N-methylbarbital is fully equal to that of barbital.</p> <p>Julian F. Smith</p>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
<p>ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

Comparative influence and therapeutic range of action of some drugs on isolated hearts of cold-blooded animals (Frog). N. P. Zakrevskaya. (Saratov Med. Inst.). Farmakol. i Toksikol. 8, No. 6, (p 14) (1945). - The ratios of toxic dose (TD) to min. effective dose (MEC) and the effects of toxic dosage (CHC) = 1) were measured for 27 drugs by the effect on rate, amplitude, and tonus of frog heart. Results were as follows:				SCIENTIFIC INDEX			
Drug	Concn. p.p.m.	Ratio TD/MEC	Coeff. of toxic dosage	Na barbital	20000	40	20
CHC	1000	4	1	EtO	25000	12.5	25
Pontocaine	12.5	20	0.0125	Caffeine	50000	50	50
Soycaine	25	25	0.025	Metrazole	50000	10	50
Lalaine-HCl	400	80	0.4	KOH	100007	33.3	100.6
Quabain	500	300	0.5				
Hexetone	500	50	0.5				
Cocaine-HCl	500	15	0.5				
Convallarin	1000	50	1				
Strychnine-HNO ₃	1000	2000	1.2				
Camphor	1100	20	1.2				
Adrenaline-HCl	1250	625	1.25				
Procaine	2000	6	2				
Pantopon	4000	20	4				
Scopolamine-HBr	4000	6000	4				
Atropine-H ₂ SO ₄	5000	5000	5				
Ephedrine	5000	20	5				
Hexenal	10000	40	10				
Nicotine base	10000	50	10				
Na phenobarbital	12500	37.5	12.5				
Morphine-HCl	12500	62.5	12.5				
MgSO ₄	12500	3.1	12.5				
Picrotoxin	10007	107	17				

Julian F. Smith

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSES AND PROPERTIES INDEX																			
<p>Mixed and combined action of some barbiturates (medinal and hexenal) with chloroform, ether, and alcohol on isolated frog heart. N. P. Zakrykhovaya (Saratov Med. Inst.). <i>Farmakol. i Toksikol.</i> 9: No. 1: 83-8 (1910).</p> <p>Hexenal (H) and medinal (M) in admixt. with CHCl₃, ether, or alc. exert additive effects on isolated frog heart, whether given in therapeutic or toxic doses. Among combined effects (one drug given before the other), CHCl₃ contributes more toxicity than does ether or alc. after dosage with H; but ether or alc. brings out the toxicity of I more sharply than does CHCl₃. Results are based on changes in rhythm, amplitude, and tone of isolated frog heart after 5-10 min. of treatment with single or mixed drug solns., e.g. 250 p.p.m. of I, 500 p.p.m. of H, 125 p.p.m. each of I and CHCl₃, or 250 p.p.m. of I with 125 p.p.m. of CHCl₃. A typical pair for combined effects (successive dosage) was 500 p.p.m. of CHCl₃ and 5000 p.p.m. of I, given in either sequence. Julian F. Smith</p>																			
<p>ASS. S. L. A. METALLURGICAL LITERATURE CLASSIFICATION</p>																			
GROUP #4										SECTION #1									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20										21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40									

COMMON ELEMENTS		PROCESS AND PROPERTIES INDEX	
1ST AND 2ND COLUMNS		3RD AND 4TH COLUMNS	
<p>ca</p>		<p>Mixed and combined effects of barbiturate (medinal and hexenal) with morphine, pentapen, magnesium sulfate, and local anesthetics on isolated frog heart. II. S. P. Zakrevskaya (Saratov Med. Inst.). <i>Farmakol. i Toksikol.</i> 10, No. 2, 24-31 (1947); cf. C.A. 41, 1334f. Tests are reported with medinal (I), morphine (II), hexenal (III), pentapen (IV), $MgSO_4$ (V), coraine (VI), procaine (VII), dicaline (VIII) and novcaine (IX), singly and in blends or sequence pairs. Concns. are in p.p.m. When equal vols. of II (6250) and III (5000) are mixed a white ppt. forms in 3-5 min. in Ringer soln., or 6-10 min. in distd. water. This compd. is so toxic that the blend of solns. at 1/12 the toxic concn. of II and III is toxic. Similar synergistic action is observed with I and II. Clinical use of III in combination with barbiturates is contraindicated. A blend of IV (2000) and III (5000) forms a white ppt., but without synergistic intensification of toxicity. Given after III, VIII and IX show antagonism instead of synergism; and there are other instances of antagonism in blends, or pairs given in sequence. The compds. formed by synergistic pairs have not been identified. Effects of the drugs on rhythm, amplitude, and tonus are given. When IX (0.5) was given after II (125), toxicity was decreased as compared with IX alone; when II followed IX, the effect on rhythm was lessened but toxicity to amplitude and tonus was intensified. The barbiturates, in the blends, decrease bradycardia and act as local anesthetics, showing direct antagonism.</p> <p>Julian F. Smith</p>	
<p>ASH-51A METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>SECTION 101000</p>	
<p>SECTION 101000</p>		<p>SECTION 101000</p>	

ZAKRIVIDOROGA, S. P.

25821 Zakrividoroga, S. P. O Propisyvanii I Oforlenii Vrachebnykh
Retseptov. Vracheb. Delo, 1948, No. 6, STB. 531-32

SC: Letopis' Zhurnal Statey, No. 30, Moscow, 1948

7AKRIVIDORAGA, S. P.

33481. K Sushchnosti Voprosa Sinergizma I Antagonizma Nekotorykh Lekarstvennykh
Veshchestv. Uchen. Zapiski (chernovits. Gos. Med. In-t), T. 1, 1949, C. 39-48

SO: Letopis' Zhurnal'nykh Statey, Vol 45, Moskva, 1949

ZAKRIVIDOROGA, S.P.

USSR / Pharmacology, Toxicology, Chemotherapeutic Agents

U-7

Abs Jour : Ref. Zh. Biol., No 2, 1958, No 8101

Author : Zakrividoroga, S.P., Zamanskiy, L.N.

Inst :

Title : The Effect of Penicillin and Streptomycin on the Functional Activity of the Thyroid Gland

Orig Pub : Antibiotiki, 1956, 1, No 5, 40-42

Abstract : A study was made of the rate of accumulation of J 131 in the thyroid gland of normal rabbits, and in those that received 5,000 units per kg t.i.d. for 10 days of either penicillin or streptomycin. A NaJ solution with labeled J131 (4,000 imp/min) was introduced subcutaneously. The rate of accumulation of J 131 by the thyroid was determined from 20 min to 10 days after its injection. Penicillin and

Card : 1/2

USSR / Pharmacology, Toxicology, Chemotherapeutic Agents

U-7

Abs Jour : Ref. Zh. Biol., No 2, 1958, No 8101

Abstract : streptomycin caused a higher rate of accumulation than normal.

Card : 2/2

NOSKOV, I.G., kand.sel'skokhoz.nauk (Tashkent); PONOMARENKO, G.Ya.;
ZAKRIVIDOROGA, S.P.; ZAKRIVIDOROGA, Z.S.; LIPSITS, D.V.;
LYUBOVSKAYA, P.I.; POLOTAY, V.A.; TARAKHOVSKIY, M.L.;
FASTOVSKIY, V.L.

Letters to the editor. Zashch. rast. ot vred. i bol. 6
no.8:10 Ag '61. (MIRA 15:12)

1. Vsesoyuznaya stantsiya po raku kartofelya Vsesoyuznogo
instituta zashchity rasteniy i Chernovitskiy meditsinskiy
institut.

(Plants, Protection of)
(Synchytrium—Toxicology)

ZAKRZHEVSKAYA, A.Y.; TSYGANOV, G.A.

Hydrogen and oxygen potential on nickel in potassium hydroxide
solutions containing various alkaline earth salt admixtures. Izv.
AN Uz.SSR Ser. khim. nauk no.2:13-25 '57. (MIRA 11:8)
(Oxygen) (Hydrogen) (Electrochemistry)

NABIYEV, M.A.; MURDOVA, E.S.; ZAKRZHEVSKAYA, A.V.

Chlorine-free nitrophoska SUM-III. Uzb.khim.zhur. 8 no.5:5-9 '64.

(MIRA 18:5)

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ZAKRZHEVSKAYA, A. V., Cand Chem Sci -- (diss) "Supertension of hydrogen and oxygen on nickel in potassium hydroxide solutions containing alkaline earth metals." Tashkent, Pub^{house}~~lication~~ of Acad Sci Uzbek SSR, 1958. 17 pp with graphs (Inst of Chemistry, Acad Sci Uzbek SSR, Chirchik Electrochemical Combine im Stalin), 150 copies (KL, 18-58, 95)

ZAKRZHEVSKAYA, A.V.; TSYGANOV, G.A.

Hydrogen and oxygen potential on nickel in potassium hydroxide
solutions containing various potassium halides admixtures. Izv. AN
U.S.S.R Ser. khim. nauk no.2:27-31 '57. (MIRA 11:8)
(Hydrogen) (Oxygen) (Electrochemistry)

NABIYEV, M.N., akademik; ZAKRZHEVSKAYA, A.V.

Study of the gas phase during the decomposition of phosphates and potassium chloride with nitric acid. Uzb. khim. zhur. no.6:3-10
'60. (MIRA 14:1)

1. Institut khimii AN UzSSR. 2. AN UzSSR (for Nabiyeu).
(Phosphates) (Potassium chloride)
(Nitric acid)

— ZAKRZHEVSKAYA, A. V.,

"Over-voltage of Hydrogen and Oxygen on Nickel in Solutions of Caustic Soda Containing Alkali Earth Metals," Tashkent, 1958. (Dissertation presented and approved for the degree of Cand. Chem. Sci.) Inst. Chem., Ac. Sci., Uzbek SSR.

NABIYEV, M.N., akademik; ZAKRZHEVSKAYA, A.V.; ITSKOVICH, A.M.

Crystallization of a complex nitric-phosphate fertilizer. Uz. b.
khim. zhur. no.1:3-10 '61. (MIRA 14:1)

1. Institut khimii AN UzSSR. 2. Akademiya nauk UzSSR (for Nabiyeu).
(Fertilizers and manures)

ACC NR: AP7003245

(A)

SOURCE CODE: UR/0198/66/002/012/0122/0124

AUTHOR: Zakrzhevskiy, A. Ye. (Kiev)

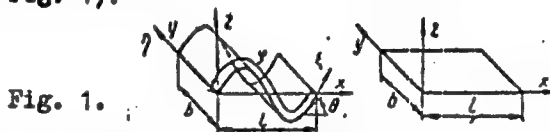
ORG: Institute of Mechanics, AN UkrSSR (Institut mekhaniki AN UkrSSR)

TITLE: On the construction of a smooth shell element approximately equivalent to a corrugated one

SOURCE: Prikladnaya mekhanika, v. 2, no. 12, 1966, 122-124

TOPIC TAGS: shell structure, shell design, shell theory, orthotropic shell

ABSTRACT: A method for simplifying the design of corrugated shells is presented. It involves replacing a corrugated shell element with an equivalent smooth one after analyzing the forces acting upon it (see Fig. 1).



The parameters of an equivalent element are found by the method developed by N. A. Kil'chevskiy (Osnovy analiticheskoy mekhaniki obolochek, v. I, K., Izd-vo AN UkrSSR, 1963). An orthotropic and a "dually" orthotropic element are investigated as the equivalent ones. In this analysis the potential energy of deformation is approximated,

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ACC NR: AP7003245

line $\eta = \text{const}$ in the xyz coordinates is taken in the form $z = f(x)$, and equations from the classic theory of orthotropic shells are used, with $N_1^*, N_2^*, M_1^*, M_2^*, S^*, H^*$ taken as uniformly distributed forces acting on a smooth element. Through a brief mathematical analysis, the equations for the desired parameters of an approximately equivalent smooth orthotropic element are derived. Since such an element is frequently unusable, equations for a system with "dual" orthotropy are also derived. They represent an indeterminate system of eight equations with nine unknowns. Taking thickness h^* as a free unknown, the following expressions for the desired parameters are obtained:

$$\begin{aligned} E_1^* &= E \frac{h}{h^*} \left(\frac{1}{l} \int_0^l \cos \theta \, dx + \frac{12}{lh^3} \int_0^l \frac{f^3(x)}{\cos \theta} \, dx \right)^{-1}; \\ E_2^* &= E \frac{h}{h^*} \frac{s}{l}; \quad \nu_{21}^* = \nu; \\ \nu_{12}^* &= \nu \frac{l}{s} \left(\frac{1}{l} \int_0^l \cos \theta \, dx + \frac{12}{lh^3} \int_0^l \frac{f^3(x)}{\cos \theta} \, dx \right)^{-1}; \\ G^* &= G \frac{h}{h^*} \frac{l}{s}; \quad E_1^{**} = E \left(\frac{h}{h^*} \right)^3 \frac{l}{s}; \quad E_2^{**} = E \frac{l_x + l_y}{l_x}; \\ \nu_{21}^{**} &= \nu \frac{1}{l} \int_0^l \frac{dx}{\cos^3 \theta}; \quad \nu_{12}^{**} = \nu \frac{l}{s} \frac{l_x}{l_x + l_y}; \end{aligned}$$

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ACC NR: AP7003245

$$G^* = G \left(\frac{h}{h^*} \right)^3 \cdot 2 \left(\frac{l}{s} + \frac{1}{l} \int_0^l \cos \theta dx \right)^{-1}$$

This analytical method is more general than previously used ones, leads to a construction of equivalent systems with various forms of anisotropy, and gives the desired accuracy when applied to reducing a three-dimensional problem to a two-dimensional one. Orig. art. has: 1 figure and 6 sets of equations.

SUB CODE: 20/ SUBM DATE: 16Feb66/ ORIG REF: 003

Card 3/3

L 52549-65 ENT(m)/EFF(c)/EMP(j)/EMA(c) Pc-L/Pr-L RPL J#RM

ACCESSION NR: AP5011193

UR/0366/65/001/004/0796/0797

AUTHORS: Tilichenko, M. N.; Zakryzhevskaya, L. T.

21
26
B

TITLE: Transition from tricyclohexanolone to oxytricyclohexylamine 7

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 4, 1965, 796-797

TOPIC TAGS: amine, organic synthesis, reduction method

ABSTRACT: Attempts to use the Leuckart reaction to change R-tricyclohexanolones to R-oxytricyclohexylamines have proved unsuccessful. Instead of the expected hydroxyamines, perhydro- and sym-octahydroacridines are obtained. Reduction of the oximes of the indicated ketones by sodium and alcohol has been successful. This method has produced from tricyclohexanoloxime a base corresponding to 9-amino-2,3-cyclohexanol(3,3,1)bicyclononanol-2. The yield is 70%. The product is colorless, hexagonal, with a melting point of 155-156C. The formula is $C_{13}H_{23}NO$. The hydrochloride, with a formula of $C_{13}H_{23}NO \cdot HCl$ has a melting point of 242-244C. The picrate, $C_{13}H_{23}NO \cdot C_6H_3N_3O_7$ melts at 214-217C. The n-acetylamine, $C_{15}H_{25}NO_2$, melts at 176-177C. The IR spectrum shows lines at 1650 (C=O), 3330 (NH), 1570, and 3440 cm^{-1} (OH). The n-benzylidenamine forms readily when solutions of

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ACCESSION NR: AP5011193

the hydroxyamine and benzaldehyde are poured into absolute alcohol. The formula is $C_{10}H_{27}NO$, the melting point 81-82C.

ASSOCIATION: Dal'nevostochnyy gosudarstvennyy universitet (Far Eastern State University)

SUBMITTED: 19Oct64

ENCL: 00

SUB CODE: OC, OC

NO REF SOV: 001

OTHER: 000

2/2

ZAKRZHEVSKAYA, N.G.

Studying liquid gas inclusions in the rocks of the Khibiny
apatite-nepheline deposits. Izv.vys.ucheb.zav.; geol. i razv.
6 no.10:48-59 0 '63. (MIRA 18:4)

1. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze.

ZAKRZHEVSKAYA, N.G.

Origin of gases in the rocks of the Khibiny apatite deposits.
Dokl. AN SSSR 154 no.1:118-120 Ja'64. (MIRA 17:2)

1. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze.
Predstavleno akademikom D.S. Korzhinskim.

ZAKRZHEVSKAYA, T.N.

Study of the prescriptions of the Pyatigorsk health resort
and possibilities of enlarging the nomenclature of prepared
drugs. Apt. delo 11 no.4:11-15 J1-Ag '62.

(MIRA 17:11)

1. Pyatigorskiy farmatsevticheskiy institut.

BAIKREHVSATA, TS. A.

"Three Cases of Heart Wounds," Vest. Kavkazii, 69, No. 3, 1979.

ZAKHNEVSKAYA, Ye.A. (Daugavpils)

Second cardiac tamponade following cardiography. Je '53.

Khirurgia no.6:77-78
(MLBA 6:8)

(Heart--Surgery)